

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 34

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MICHEL BEUROTTE and PIERRE DE LA FARGE

Appeal No. 95-4314
Application No. 07/963,524¹

HEARD: February 8, 1999

Before GARRIS, WALTZ, and KRATZ, Administrative Patent Judges.
KRATZ, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 12-20, which are all of the claims pending in this application.

¹ Application for patent filed October 20, 1992. According to appellants, this application is a continuation of Application No. 07/606,199 filed October 31, 1990, now abandoned.

BACKGROUND

The appellants' invention relates to a ladle for the preparation of metal and a method for producing a refractory bottom lining for the ladle. An understanding of the invention can be derived from a reading of exemplary claims 12 and 13, which are reproduced below.

12. A ladle for the preparation of metal and adapted to be turned over, comprising:

an open-top metal case having a generally cylindrical side wall and a generally flat circular bottom,

a refractory side wall lining and a refractory bottom lining having a tap hole disposed on an inner surface of said case,

wherein a surface of said bottom lining for contacting the metal in preparation is concavely curved and having at every point a slope in a direction toward said tap hole,

wherein said tap hole is eccentrically located with respect to the center of said bottom,

wherein said refractory bottom lining is formed by at least an assembly of independent elements with joints therebetween, and

wherein said assembly of the independent elements forms a mosaic having joints, some of said joints being arcuate and concentric with the tap hole and remaining joints radiating

relative to the arcuate joints, the radiating joints being offset from one concentric joint to another concentric joint.

13. A method for producing a refractory bottom lining for a ladle for the preparation of metal and adapted to be turned over, the ladle having an open top metal case to be lined that has a generally cylindrical side wall and a generally flat bottom, the bottom lining having a tap hole therein, eccentrically located with respect to the center of the lining and the bottom lining comprising an assembly of independent elements separated by joints and the surface of the refractory bottom lining being in contact with the metal in preparation and being concavely curved and having at every point a slope in a direction toward the tap hole, the method comprising the steps of:

producing a mold having a bottom that is convexly curved corresponding to the concave curvature of the surface of the bottom lining and having vertical partitioning walls defining compartments corresponding to the geometry of the elements of the refractory bottom lining, the walls having a section corresponding to the section of the joints;

pouring into each of the compartments a selected refractory concrete and allowing it to set to form the elements; and

stripping the elements from the mold and providing each with a reference.

REFERENCES OF RECORD

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Coulson	1,292,582	Jan. 28, 1919
Cope et al. (Cope)	3,333,746	Aug. 1, 1967

THE REJECTION

Claims 12-20 stand rejected under 35 U.S.C. § 103 as being unpatentable over Coulson in view of Cope.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejection, we make reference to the examiner's answer for the examiner's reasoning in support of the rejection, and to the appellants' brief including the copy of the Gehin declaration accompanying the brief for the appellants' countervailing arguments.

OPINION

We have carefully considered the respective positions advanced by the appellants and the examiner. For the reasons set forth below, we will not sustain the rejection.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). Furthermore, the conclusion that the claimed subject matter is prima facie obvious must be

supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art.

Appellants argue (brief, page 10) that the subject matter defined by method claim 13 cannot be found in the applied references. We agree.

In particular, claim 13 is drawn to a method for producing the refractory bottom lining for a ladle that enumerates the following combination of steps for which the examiner has not furnished a prior art evidentiary basis for establishing the obviousness thereof: (1) producing a mold with a specified bottom curvature corresponding to the curvature of the surface of a ladle bottom lining and including compartments shaped to correspond to the geometry of elements of the bottom lining; (2) pouring refractory concrete into each of the compartments

and allowing the concrete to set to form the refractory bottom lining elements; and (3) stripping the formed elements from the mold and marking each with a reference. The examiner has not met the initial burden to show how the subject matter defined by claim 13 was suggested and would have been rendered obvious within the meaning of 35 U.S.C.

§ 103 by Coulson taken together with Cope.

Thus, we do not agree with the examiner's assertion that "Coulson shows all aspects of the above claims except the specific refractory lining..." (answer, page 3) for the reasons indicated above.

In addition, we note that the examiner has not specifically identified the evidentiary basis in the applied prior art for several specific structural features found in the ladle defined by claim 12, which are urged by appellants as not having been suggested by the applied references. In particular, appellants, via the Gehin declaration under 37 C.F.R. § 1.132 (Gehin declaration, pages 2-4), urge that the particular claimed slope of the surface of the bottom refractory lining relative to the tap hole location, and the specific shape and structure of the refractory bottom lining of

the ladle (see appealed claim 12) are claimed features that were not suggested by and would not have been rendered obvious by the applied references for use in a ladle comprising an open top metal case having a generally cylindrical side wall, a generally flat circular bottom, a refractory side wall lining and a refractory bottom lining. We agree.

Accordingly, the record before us does not support a conclusion that the examiner has met the initial burden of presenting a prima facie case of obviousness. It follows that we cannot sustain the examiner's § 103 rejection of claims 12, 13, and dependent claims 14-20 as being unpatentable over Coulson in view of Cope.

The decision of the examiner is reversed.

REVERSED

BRADLEY R. GARRIS)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
THOMAS A. WALTZ)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
)	
PETER F. KRATZ)	
Administrative Patent Judge)	

PFK/jlb

Appeal No. 95-4314
Application No. 07/963,524

Page 9

Cushman, Darby & Cushman
Attn: G. Lloyd Knight
1100 New York Avenue, N.W.
Ninth Floor
Washington, DC 20005-3918

JoAnne

Appeal No. 95-4314
Application No. 07/963,524

APJ KRATZ

APJ WALTZ

APJ GARRIS

REVERSED

Prepared: November 10, 1999